

REMARKS

This Amendment, submitted in response to the Office Action dated October 27, 2003, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-11 remain pending in the application. Claims 1, 8 and 11 have been rejected under 35 U.S.C. § 102 as being anticipated by Maeda et al. (U.S.P. 5,606,420). Claims 1 and 7-9 have been rejected under 35 U.S.C. § 102 as being anticipated by Finelli et al. (U.S.P. 4,937,676). Claims 1 and 2 have been rejected under 35 U.S.C. § 102(e) as being anticipated by McIntyre et al. (U.S.P. 6,091,909, hereafter "McIntyre '909"). Claims 1, 2 and 11 have been rejected under 35 U.S.C. § 102(e) as being anticipated by McIntyre et al. (U.S.P. 6,040,849, hereafter "McIntyre '849"). Claims 2-3 and 6 have been rejected under 35 U.S.C. § 103 as being unpatentable over Maeda in view of Kodama (U.S.P. 5,231,511). Claims 3-4 have been rejected under Section 103 as being unpatentable over McIntyre '909 in view of Kodama. Claims 5 and 10-11 have been rejected under Section 103 as being unpatentable over Finelli. Claims 5 and 7 have been rejected under Section 103 as being unpatentable over Maeda. Applicant respectfully submits the following comments in traversal of the prior art rejections.

Applicant's invention relates to a camera having a printer feature. Conventional cameras that can accommodate a printer suffer from two deficiencies. First, the printer is often bulky in shape to include both the printer mechanisms and the power devices to drive the printer. Second, as a related matter, a sufficient power supply must be included in order to drive both the

imaging and printing mechanisms. A power supply that is sufficient to supply the required driving voltage typically is large in size. Applicant's invention obviates these deficiencies.

Referring to Fig. 2, the digital camera includes a chamber 16 which can alternatively receive 1) a film pack including recording media (Fig. 4, element 12) to be printed in a printer section 15 and 2) a battery pack 17. The battery pack contains batteries in a case 19, where the case 19 has contours similar to the film pack 13. The case has terminal connectors with counterpart connectors formed in the side wall of the loading chamber. The battery pack may be used to charge the main power source batteries (Fig. 4, element 8) or supplement or substitute the main power batteries. Accordingly, sufficient power can be provided to the camera without increasing the size.

Turning to the cited art, each of the Maeda and Finnelli references relates to modular components to be attached to a camera. In Maeda, a main camera section 22 can accommodate a TV reproduction section 23, a printer section 25 and a monitor reproduction section 24 (Figs. 31-34). The components are interconnected in various configurations as shown in Figs. 35-38. Finnelli also relates to modular camera components. Referring to Fig. 1, a printer housing 44 engages with a camera 12 via an elongated and outwardly extending tongue 65 and electronic connections 70. The connectors permit an electronic storage device 80 to be connected with the printer 14 of the camera 12. It is also noted that the printer 14 can operate with the storage device 80 while disconnected from the camera. Col. 7, lines 35-39.

McIntyre '909 and '849 each relate to a film pack having a storage cavity for batteries to drive the printing mechanisms of the camera. In McIntyre '909, the digital camera 11 includes

an attached ink jet printer 13, where the film pack is inserted into the printer 13. Fig. 7 and Col. 4, lines 62-65. An inserted cartridge includes batteries 34, and battery contacts 26 on each side of a cartridge 10 make electrical connections (-Vpb, +Vpb) between the cartridge 10 and a power supply for the printer 13. Col. 5, lines 20-30. A separate battery 50 supplies the drive power (+Vcb, -Vcb) for the image processing elements. Col. 6, lines 21-26. See also Fig. Fig. 5B. In McIntyre '849, a similar electrical connection is used, with electrical contacts 26 corresponding to battery contacts of the cartridge 10. Referring to Fig. 4 of the '849 patent, the negative Vcb (ground) node is common to the image capture electronics and the printer electronics. Therefore, a separate positive potential must be supplied via the batteries 26 in order to drive the printer electronics.

The Examiner contends that each of Maeda, Finelli, McIntyre '909 and McIntyre '849 teaches features of independent claim 1. The rejections are not supported for at least the following reasons.

First, though the Examiner identifies a power source in each reference, independent claim 1 describes a power source for supplying a camera section and the printer section. With regard to the rejections over McIntyre '909, the reference specifically contemplates a separate power source for the camera portion and the printing portion. See Abstract and claims. This is also made clear in the Figures 5A-5B, where one power source Vcb is provided for the image processing portion and a separate power Vpb is provided for the printer portion. Therefore, to the extent that the Examiner relies on power element 50 as corresponding to the power source, the power source only drives the image capture and processing features. Because the electrical

interconnections of McIntyre '849 are substantially similar to that of McIntyre '909, McIntyre also lacks the above features of the power source for the print section and camera section. For example, in McIntyre '849, a separate positive potential supplied from battery connection 26 would need to be connected to the printer, since only a ground connection is indicated by -Vcb. With regard to the rejection over Finelli, the Examiner contends that the power source is inherent. However, even assuming that a power source would be necessary to drive the camera and the printer, there is no requirement that the power source drive the camera portion and the printer portion as claimed. For example, the McIntyre references discussed above clearly contemplate separate power sources for the camera and the printer. Moreover, Finelli teaches that the printer need not operate with the camera. Col. 7, lines 35-40. Therefore, the printer would have its own power source, rather than requiring a source common with the camera electronics. Therefore, the rejections over McIntyre '909, Finelli and McIntyre '849 are not supported for at least these reasons.

Second, claim 1 describes a chamber holding a recording material and also a connection device provided in the load chamber to an extending device to extend a function of the camera. Maeda does not include a chamber for the recording material which can also extend a camera function. In Maeda, the load chamber for print materials is included in a modular separate printer. The material holding chamber does not include an additional mechanism to extend a function. The Examiner cites connectors 22a as the connecting chamber. However, the electrical connectors 22a do not hold recording materials. Rather, the recording material is provided by the modular device. Finelli does not include such the chamber for holding a

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medium and also connecting device. Similar to Maeda, the recording medium is disposed in a modular print unit, and the chamber includes no additional mechanism to extend the function. The Examiner cites hollowed section 72 as corresponding to the chamber. However, the chamber 72 does not accommodate a recording material, but only engages with another device such as the memory 80. Therefore, Maeda and Finelli do not anticipate the claims for these additional reasons.

Third, independent claim 1 describes that the extending device is loaded in place of the other recording materials. In each of the cited references, any power supplies augmenting operation of the camera are supplied in addition to the recording material and not in place of the recording material. The Examiner must give these recitations patentable weight as they provide a structural feature of the loading chamber that it operably accommodates the extending device in place of the recording materials. None of the cited art includes this replacement aspect of independent claim 1.

Because claims 2-11 are dependent on claim 1, they are patentable based on their dependency. The secondary references of Kodama do not make up for the deficiencies of Maeda, Finelli, McIntyre '909 and McIntyre '849.

With further regard to claims 5 and 7, these claims respectively recite a structure for the printing device. The Examiner apparently concedes that none of the art specifically recite the features of these dependent claims, but cites Official Notice for teaching the claim features. Multiple forms of printing are possible that would not require the structure of claims 5 and 7. For example, in Finelli, the film is moved which would obviate the need to move a printing head.

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Col. 6, lines 49-50. Maeda relates to a thermal ink transfer form of printer. Col. 20, lines 22-32.

Neither Finelli nor Maeda suggests the structure set forth in claims 5 and 7 or even suggests structures compatible with that claimed. Applicant challenges the Official Notice.

Applicants add claims 12-15 to describe features of the invention more particularly.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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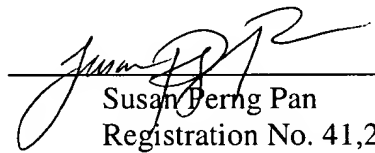
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